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ABSTRACT

A practicum aimed to strengthen the reading abilities of first grade students. Objectives included having first graders: (1) strengthen phonetic and decoding skills; (2) progress to grade level in the basal reading series; and (3) master a problem solving process that would enrich critical thinking skills. Subjects, 52 first grade students, received instruction over a 12-week period which incorporated phonics instruction into the current whole language and basal approach to teaching reading, and which taught a step-by-step problem solving process. Methods, materials, and lesson plans were provided to teachers. Results indicated partial achievement of the goals. While the mastery of phonetics skills was attained, neither of the other two objectives were attained. Implementation of the practicum did provide for improvement and provided students with a positive attitude toward reading. (Five tables of data are included, and 9 appendixes containing phonics and problem-solving pretests and posttests and sample lesson plans are attached.) (SR)

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STRENGTHENING THE READING ABILITIES OF FIRST GRADERS THROUGH AN INTENSIVE PHONICS PROGRAM AND PROBLEM SOLVING PROCESS

by

Sheryl Clarke

A Practicum Report

Submitted to the Faculty of the Center for the Advancement of Education, Nova University, in partial fulfillment of the requirements for the degree of Master of Science

July, 1991

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Abstract

Strengthening the Reading Abilites of First Graders through an Intensive Phonics Program and Problem Solving Process.
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Descriptors: Elementary Education/Phonetic Reading/Phonic Analysis/ Whole Language/ Beginning Readers/Decoding/Phonetic Practice/ Phonetic Application/Problem Solving/Critical Thinking/Reading/

The main goal of this practicum was to strengthen the reading abilities of first grade students. Objectives included having first graders strengthen phonetic and decoding skills, having first graders progress to grade level in the basal reading series, and having first graders to master a problem solving process that would enrich critical thinking skills.

The writer provided methods, materials, and lesson plans to teachers for implementation of this practicum. Some materials were teacher made and others were obtained from the primary specialist. Communication was maintained with the other teacher implementing this practicum to provide all students with equal opportunities.

Results indicated a partial achievement of the goal of this practicum. The objective involving mastery of phonetic skills was attained. The objective involving mastery of basal magazine test was not attained and the critical thinking objective involving a problem solving process was not attained. Implementation of this practicum did provide for improvement and provided students with a positive attitude toward reading.

Authorship Statement

I hereby testify that this paper and the work it reports are entirely my own. When it has been necessary to draw from the work of others, published or unpublished, I have acknowledged such work in accordance with accepted scholarly and editorial practice. I give this testimony freely, out of respect for the scholarship of other professionals in the field and in the hope that my own work, presented here, will earn similar respect.

Signed Sheryl Clarke

Minor contributions of a professional character and comparable nonprofessional assistance may also be acknowledged.

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Chapter I

PURPOSE

Background

The public elementary school is located in a rural community near a rapidly growing city. Its history begins in 1884 with an enrollment of approximately 14 students. The years that followed brought new school buildings, additions, renovations and more students. The growth of the school had been slow but steady. Enrollment was approximately 420 boys and girls.

The school served children in grades pre-kindergarten through fifth. Most students were socioeconomically low middle class. Approximately 17 per cent of the school enrollment consisted of black minority children from a nearby small, low income residential area.

Students received instruction in one pre-kindergarten classroom, two kindergarten classrooms, two first grade classrooms, one split first-second grade classroom, two second grade classrooms, three third grade classrooms,two fourth grade classrooms, two exceptional education

classrooms, and one exceptional education student resource classroom for part-time students. All students were instructed in reading, math language arts, science, social studies and physical education. On a weekly basis, children attended classes in music, art, and guidance. Enrichment activities were provided by the primary education specialist and the media specialist. Computer literacy was gained through weekly attendance in the computer lab. Major Work Area was a weekly pull-out program for gifted children. The school also provided additional instruction for children reading below grade level through a federally funded Chapter I program.

The faculty and administrative staff consisted of the principal, a guidance counselor, a primary education specialist, a school psychologist, two part-time media specialists, a physical education teacher, three exceptional education teachers, one Chapter I teacher, one part-time speech teacher and fifteen regular classroom teachers. The guidance counselor assumed administrative duties in the principal's absence and counseled individual students in addition to whole and small group instruction. The primary specialist instructed small group enrichment and/or remediation and assisted teachers with student record keeping.

The school had a close-knit group of parents that volunteered in classrooms on a regular basis. Some volunteers worked with children on academics under a teacher's direction. Aides were also available to students for additional assistance at the teacher's discretion. The school was well supported by the community and had been adopted by a local business for additional funding.

The two first grade classrooms provided a setting with 26 students in each. The total student target population was 52, consisting of 22 girls, 30 boys, 11 Black and 41 White. Ages ranged from 6 to 7 years. Regular attendance was not a problem for the majority of the students.

The writer's role was a first grade teacher certified in grades one through six by the state of Florida. The writer had three years teaching experience, all on a first grade level. The writer was responsible for teaching reading, math, spelling, language arts, science, social studies, and health on a daily basis. Also, the writer had agreed to teach 50 per cent whole language approach to reading and 50 per cent skill and basal instruction. The writer had demonstrated effective teaching

capabilities on all evaluations as described in the state of Florida Domains.

PROBLEM STATEMENT

Reading is one of the original three "R's" in oldest definition of a complete education. Few would argue about its importance. Therefore, it is crucial that elementary school age children are provided with the best opportunity available to become successful readers.

Through experiences in teaching first grade at the school setting, the writer had realized that many of the students were weak in reading skills. Although instruction in whole language and instruction involving a basal was implemented daily in the classrooms, a great number of students performed unsatisfactorily on evaluations that involved a variety of reading skills. Teachers worked with students in whole groups and small groups for effectiveness of instruction at different levels. Regardless of the many efforts of the students and teachers, many children had continued to struggle in reading.

In the 1989-90 school year at the setting, first grade reading scores

on the Comprehensive Test of Basic Skills (CTBS) were much lower than the national average percentile (50.0). Table I shows the total battery percentile of scores in reading of first graders at the school setting as compared to the district averages of first graders in the same areas of the CTBS.

Table I
Comprehensive Test of Basic Skills

	Percentile in Reading
School	39.0
District	51.0

Results on the CTBS indicated scores at the practicum school setting to be lower than the national norm and much lower than the district scores of first graders at other schools. A difference of 12 per cent in the scores when comparing the school setting scores with the district scores led the writer to assume that first graders were weaker than

most students in the district.

Table II shows a total of students that were reading successfully at the appropriate basal reading level (Column A), students reading at the appropriate basal reading level, but struggling (Column B), and students reading below the appropriate basal level (Column C).

Table II
Reading Levels of Target Population

	Column A Successful	Column B Struggling	Column C Below
Class 1	13	8	5
Class 2	14	4	7
Total	27	12	12

The reading levels displayed in Table II documented that the problem was ongoing and gave an overview of the magnitude of the problem. More than one fourth of the students were below the necessary reading level for

first grade mastery for that time of the school year. Almost one half of the students were struggling at the satisfactory level or reading below the appropriate level. That left only about one half of the students reading successfully.

Consequently, the writer viewed the problem existing at the school setting in this practicum was that first graders were performing below national averages on achievement tests because they had weak reading abilities. A total battery of scores for a group of first grade students should reflect scores on or above the national norm. The writer attempted to develop a program that would assist the students in strenghthening overall abilities.

In order to attempt to improve reading abilities of the first graders, the writer researched the possible causes of the problem. Through experience, the writer had discovered several aspects that could have an influence on a child's reading progress. Some factors outside the classroom may include poor home environment, a lack of parent involvement and student immaturity.

During previous experiences, the writer had recognized the fact that many of the children with weak reading abilities lived in the low income residential area mentioned earlier in this practicum. Sometimes these children went home to an empty house with less than adequate necessities for living. Some children lived with guardians, relatives or single parents that were struggling financially. Many times these children also lacked the parent participation for home study. Most of the adults were not educated and consequently the children were not read to or worked with at home in school related tasks. This residential area is also known for heavy drug trafficing. This kind of home environment, in addition to the lack of parent participation, no doubt, had a significant influence on the health, well being, attitude and success rate of the student.

A large number of the students came from farming families. Parent participation was again somewhat limited since some parents held the opinion that teachers should do all the teaching at school and home study should not be necessary and was not wanted. These children were however, well taken care of even in the instance of divorced parents. The writer

realized these potential causes of the problem but could not begin to solve these social problems. It was the opinion of the writer that classroom teachers must deal with these circumstances individually and as well as possible.

The writer observed that some of the first graders lacked the maturity to achieve success in reading. The writer had experienced instances of children functioning below the majority of the other students in all areas. Many times physical and intellectual immaturites were observed. This lack of maturity contributed to low achievement in reading since children may not have been developmentally ready to be able to concentrate at the level required for first grade instruction. These children were placed in first grade with the hope that they would "catch-up eventually". The writer felt that little could be done to correct grade placement since retention, especially in the event of immaturity, was not an option at the school setting.

The writer recognized the outside influences on the first graders reading success rate in school but also identified possible causes within

the school. Through past experiences, the writer saw a lack of mastery of prerequisite skills for reading and the instructional methods of teachers as possible causes for weak reading achievement.

It had been the experience of the writer that many first grade students had not mastered some kindergarten objectives before entering first grade. In the 1988-89 school year, approximately 13 out of 27 students could not recognize all the consonants upon entry into the first grade. Approximately 10 out of the remaining 14 could recognize consonants and consonant sounds. None of the children had any knowledge of vowels or vowel sounds. Cross grade level meetings between kindergarten teachers and first grade teachers are now being held to overcome this weakness in prerequisite skills.

Instructional methods of first grade teachers were also a possible cause for weaknesses in reading ability. Whole language approach had been practiced and had been very effective in helping students realize the importance of reading and to encourage pleasure reading. However, decoding skills and word analysis had weakened considerably. Although

the writer was an advocate of whole language instruction, it was apparent that the lack of phonetic skills caused many children, especially weak readers, to attempt only easy reading material, to develop poor comprehension skills and to eventually perform inadequately on evaluations.

Another instructional weakness may have fallen under the areas of comprehension and critical reading skills. As teachers focused on language experiences and creative reading and writing, reading for critical thinking and comprehension could have been overlooked. Teachers may also have assumed that comprehension was being mastered because of active oral language discussions in class. Critical reading for details and facts involved a difficult comprehension level. If the reading comprehension process is not taught, children may not develop the comprehension level sufficient to manage critical thinking.

In the opinion of the writer, many low achievers in reading at the school setting struggled because of several possible factors. Outside influences such as poor home environment, lack of parent participation,

and developmental immaturity could all have had a definite and lasting affect upon first graders reading success. Some students struggled because of being placed into first grade without the needed mastery of prerequisite skills for reading. Instructional methods of teachers in phonics and comprehension skills played an important role in the reading development of students.

The target population of this practicum consisted of first graders that were struggling in reading due to one or more of the above mentioned factors. The population was not unique in any one aspect except clarity of a definite need for immediate improvement in reading abilities.

Outcome Objectives

The goal of this practicum was to strengthen reading abilities of first grade students. The writer hoped to successfully reach the following objectives.

1. After a 12 week implementation of a phonetic instructional program, 40 students of the 52 students in the target population will master 24 out of 30 skills tested on a teacher made evaluation.

2. After a 12 week period, 40 of the 52 students in the target population will master 80 per cent of all skills on the three 1-2 reading text magazine tests.

3. After a 12 week period, 40 of the 52 students in the target population will provide an oral or written solution to a real life story problem using 4 out of 5 steps in a problem solving/critical thinking process.

Objective one was measured by a teacher made test that consisted of beginning consonant sound recognition, long and short vowel recognition and digraph and blend recognition. Students were given a pre-test (Appendix A:46) that consisted of 30 items. The pre-test assessed needs and levels of the population. Table III shows results of the pre-test.

Table III

Phonics Pre-test Results

Total Students	Scores
12	90% and up (Mastery)
8	80% - 90%
7	70% - 80%
25	10% - 70%

Results indicated needed improvement in almost half of the target population. A similar post-test (Appendix B:49) with 30 test items was given at the conclusion of the implementation.

Objective two was measured by the three magazine tests in the 1-2 level of the Houghton Mifflin Reading basal series. All skills in the evaluation will be mastered by correct responses to 4 out of 5 questions in each area. The evaluation was administered when the students finished the 1-2 textbook.

Objective three was measured by a teacher evaluation of the written or oral response to given real life story problems. Students were given a story problem at the appropriate reading level. Students determined the solution by applying critical thinking comprehension skills while using a 5-step problem solving process. Students were given an oral pre-test (Appendix C:52) to assess capabilities of students when attempting to solve a problem. Results of the pre-test indicated that more than half of the students could not listen to a story and determine critical details to find a solution without teacher direction. Only seven children were able

to comprehend the story at the level required to provide a satisfactory solution. Two children were unable to find a solution at all. The pre-test indicated a definite need for improvement in reading comprehension. The post-test (Appendix D: 54) required 40 of the 52 children to read the story independently at the appropriate level and provide an oral or written solution using a 5-step solution process. The classroom teacher will determine the success of each objective.

Chapter II

RESEARCH AND SOLUTION STRATEGY

As the writer analyzed possible causes of the problem of the below average first grade readers, it became evident that some of the causes could not be solved easily. Solving the outside influences were beyond the capabilities of the writer. Action had already been taken to guard against the lack of prerequisite skills in first graders. Since the writer was also a first grade teacher at the setting, instructional methods and strategies were researched and evaluated for possible solutions to the problem.

Many methods concerning reading success and reading instruction of the lower grades were researched. Much research revolved around whole language approach to reading instruction. Also, a great amount of research had been related to phonics and the phonetic approach to reading instruction.

Much is to be said about the effects and outcomes of the whole language approach. Lamme (1989:46) explained the overall goal of whole

language "...the instruction is to help children become avid readers". Cullinan (1990.46) described whole language as a "...philosophy rather than a particular set of methods or activities". There is strong evidence that whole language approach to reading cannot only strenghthen a child's interest in reading but can also provide additional knowledge of some basic language arts skills. However, since whole language instruction at the primary level was being provided at the setting, the writer saw a great need to include other instructional opportunities for insufficient comprehension abilities.

Throughout the review of research materials, the writer discovered the many studies that reinforced the theory that phonics is a major segment in the process of learning to read. One such study by Tunmer and Nesdale (1985) revealed supportive evidence of the phonics approach. Tunmer and Nesdale reviewed many other similar studies by other researchers before beginning the new study of phonics in reading. Tunmer and Nesdale's study consisted of first grade students and of the utilization of phonetic segmentation skills. Each portion of the studies revealed phonetic

segmentation to be a definite prerequisite for being able to read and in too many cases, it was even suggested that the lack of phonological awareness may even be a very important barrier to successful reading ability. The summarized outcome of the study proved phonics to be a "...necessary but not sufficient condition for reading success" (Tunmer and Nesdale, 1985:425).

Dermott, Pinzari, Roberts and McIntire (1982) contributed information concerning phonics. Groups of first grade boys instructed by a basal series with a phonetic supplement were evaluated on skills, global reading achievement and syntactic density. The results showed no significant differences in skills performance of the two groups. However, a "T" test showed significant differences in overall or global reading achievement. The boys in the intensive reading phonics program scored significantly higher than the basal taught group. Another "T" test showed a significant difference in syntactic density. Again, the groups instructed in the intensive phonics program excelled above the groups in the basal program.

While continuing the research, the writer discovered a study that had

similar characteristics to this practicum (Umbach, Darch, and Halpin, 1987). The study was conducted at a rural low income community school. Achievement scores were on or below the state average in reading and language. Scores were much lower than the county average in both areas. The study involved a comparison of basal instruction and an experimental instructional phonics program. Also included was an extensive comprehension practice program. Significantly higher achievement scores were achieved by the experimental program. Researchers believed that at least three things resulted in the higher scores "...the degree of structure, the amount of practice provided, and the strong phonics emphasis..." (Umbach et al., 1987:6).

An interview conducted with a local elementary school principal revealed a supportive opinion when remembering experiences as a first grade teacher. The principal contended that phonics is a portion of a good reading program. This educator also felt that children should develop a strong base of decoding abilities and performances on tests will reflect this ability as well as the obvious love of reading. This principal helped

the writer examine a basal series, The Economy Company, (Matteoni, 1974). This series advocated language experiences and a strong phonetic approach.Some schools in the district use it as a guide for incorporating phonics into their programs. The principal agreed that test scores indicate a definite need for a program consisting of phonics and language skills (Rafferty, 1-24-91).

During an interview, a primary specialist at a local elementary school gave views concerning basal instruction and partial phonic instruction. Many years as a first grade teacher left experiences to examine when thinking about the best solution to the low reading abilities of first grade students. This teacher remembered intense phonic instruction in addition to language experiences and continual practice to reinforce all skills taught. Application centers, listening centers, games, guided practice and direct instruction were all components of the phonics program implemented in the classroom. This teacher maintained with assurance that test scores were almost always on or above national averages (Curry, 1-18-91)

Another contender of phonics reinforcement activities is an expert in the field of early reading (Spiegel, 1990). Spiegel explained that an effective phonics program should include a variety of different kinds of reinforcement opportunities for students. Practice should include application of skills involving whole words and eventually practice in sentences and paragraphs. Spiegel maintained that phonics and the application of phonics in the reading program is an undeniable necessity.

Many teachers and experts believe phonics to be a successful strategy in the instruction of reading. However, the instructional method used to teach phonics is extremely important. Two major approached most ofter used is the synthetic (explicit) and the analytic (implicit). The synthetic method "...starts with the small parts and synthesizes them into the whole..." (Alexander, 19483:93). The analytic approach "...presents the whole word first and then analyzes the word into the speech sound..." (Alexander, 1983:94). Although neither method has proven more effective than the other, the analytic tend to integrate easily with the language experience. This deductive method motivates children to become more

avid readers. This instruction consists of direct teacher instruction, auditory-visual association, practice and application.

Umbach, Darch, and Halpin (1987) stated that the synthetic approach also involves direct teacher instruction but in a more systematic manner. Step by step modeling, clear statements of rules, and decoding procedures and effective feedback are all procedures that involve teaching students to mastery through the synthetic approach. Umbach et al, concur that a direct instructional teaching model such as the synthetic approach contributes to the overall success of readers at the primary level.

Swajkowski (1985) studied the use of word families as a method of teaching children phonics. This writer was able to instruct a group of students utilizing Open Court basal series and incorporating word families as a supplement to the phonics instruction within the series. Although some teachers use word families as a method of instruction, Swajkowski's study revealed no proof that it was a successful instructional approach.

Not only is the instruction of phonics important but the successful

instruction of comprehension is a must. Reading comprehension is the ability to derive meaning from what is read (Alexander, 1983). Teachers have the opportunity to promote growth in comprehension. Sufficient guidance can lead to a stronger desire in students to grasp the meaning of a text. Instructors can guide students to discover reading to be meaningful and informative. A recent theory is the schema theory (Alexander, 1983). Teachers direct students to realize the importance of previous experience to reading of a text by relating it to something already familiar or important to the student. Real life stories that children can relate to and find meaning in can be an effective method of teaching the critical thinking needed for effective comprehension. Alexander explained that the reader's purpose is to "...find information or solve a problem through reading, then adequate comprehension is achieved when that purpose is accomplished" (Alexander 1983:145).

Jones (1984) is in agreement with Alexander's theory of prior knowledge being necessary to critical reading and thinking. This writer contended that the reader can learn faster and easier if there is a strong

background in the subject matter being taught. This makes the material become meaningful and relevant to the student. Jones's research showed evidence that direct teacher instruction of comprehension skills can promote improved reading and comprehension abilities. A process of direct teaching before reading, direct assistance in processing information after reading, and immediate feedback concerning student response to the text can be effective.

Addison-Wesley Math Series (1985) demonstrates a 5-step process for solving mathmatical word problems that is similar to the critical comprehension thnking process mentioned above. The process involves reading, collecting data, understanding the question, finding a solution, and checking back over the solution. The critical thinking involved while solving a math problem can be directly related to solving real life story problems. A similar process can be used to assist students in reading, comprehending and solving a real life story problem.

The writer of this practicum concluded that phonetic instruction should be a part of the reading instruction at the first grade level. At the

setting, whole language approach to reading involved fifty per cent of the direct teaching time. The writer valued the advice and opinions of colleagues. A principal, a primary specialist, other experts, and the writer shared the idea that phonics skill instruction must be an integral part of reading instruction in the first grade.

Research and conclusions by Umbach,Darch, and Halpin (1987) convinced this writer that not only is phonics instruction necessary to the successful reading program but also that instruction should be structured and skills must be practiced frequently. Also, this study shows merit because of its similarities to the circumstances of this practicum.

The writer was also convinced that direct instruction of both phonics and comprehension skills would be conducive to a successful reading program. Alexander (1983) and Umbach et al, (1987) reinforced the writer's theory of direct instruction. They explained the process of synthetic and analytic approaches to phonics both involving direct teacher instruction.

This writer believes that the instruction, application, practice, and

listening centers that were incorporated in another reading class were beneficial to students. Others also supported the idea of frequent practice of skills until mastery is obtained (Spiegel, 1990: Alexander, 1983).

Therefore, it was the intent of this practicum to incorporate phonics instruction into the current whole language and basal approach to teaching reading. Strategies were to include systematic and structured direct whole group instruction (Umbach et al., 1987). The analytic approach to phonics was to be the base for most instruction and analysis into speech was to promote reading for meaning (Alexander, 1983). A strategy to promote critical thinking through comprehension of real life stories related to acquired schema was to be accomplished through a process of direct whole group teaching, assistance in comprehension and feedback about solutions. A step by step process to solve these real life story problems was to be taught, practiced, and evaluated (Addison-Wesley, 1985).

Strategies for small group practice were to include games to apply

skills previously taught, listening centers for application, and centers for reading comprehension practice. Computer use for additional phonics application was to be offered on a limited basis. The writer planned to implement this program of direct instruction of phonics and comprehension and the application of both to strengthen the reading abilities of first grade students at the school setting.

Chapter III

METHOD

Practicum implementation involved classroom teacher instruction and student participation that covered a period of twelve weeks. Participants at the setting were the principal, the observer, the writer, the media specialist, the classroom teachers and the first grade students.

Materials needed for implementation included listening centers that were obtained from the primary specialist. These centers included tapes and activity sheets for phonemes and graphemes (Appendix F: 53).

Short stories at different levels were available at a center for comprehension application in critical thinking problem solving. Stories were followed by erasable cards containing the 5-step problem solving process. Each step was color coded to coordinate with a self-help reference chart at the center. Feedback to students on each story followed in the next direct instruction of problem solving.

Lesson plans were provided for direct instruction in both phonics and comprehension problem solving. The classroom teacher implemented as described by the writer. Teachers were provided with the following instructional materials prepared by the writer.

1. Pre-test and post-test phonics skills
2. Pre-test and post-test of critical thinking stories
3. Instructional plans, practice sheets, books and real life story problems for three days each week for 12 weeks of phonics and problem solving instruction
4. Listening centers that were rotated week by week between classes

Tasks were performed in a systematic sequential order to best benefit all students. Teachers alloted a block of time three days each week for 12 weeks to implement this practicum to insure that all children had equal access to instruction, activities, and practice. A suggested lesson plan included fifteen minutes of direct instruction and fifteen minutes of practice activities two days a week for phonics and one day a week for problem solving. Direct instruction of the critical thinking/problem solving process involved students in brainstorming activities of possible

solutions to the given problem. This allowed students to go beyond the facts and actually analyze and evaluate solutions based on critical details. Literature books were used to help children realize the integration of decoding words and real reading as a portion of the direct phonics instruction (Appendix G: 59). The suggested plan consisted of a weekly topic of study with three days of detailed lesson plans (Appendix H: 57).

One week prior to beginning implementation of the practicum the writer met with the principal to discuss and review details and tentative beginning and ending dates of implementation. The writer also met with the classroom teacher to discuss procedures, methods, evaluations, lesson plans, and time management of this practicum. The writer met with the media specialist to set up time for possible use of the computers as an option to instruction if desired by a teacher. The following is a week by week schedule of implementation activities.

WEEK ONE

Day One: Teachers introduced the new program by using flash cards to review already familiar consonants (fifteen minutes). Teacher explained

method of group rotation for centers. Students were sent to centers for practice (fifteen minutes).

Day Two: Teacher read story problem A orally to class and demonstrated the process of 5-steps to reach a solution. Teacher read Story B orally to class for guided practice. Teacher reviewed centers and explained that the problem solving center will be one that each child will visit once a week (fifteen minutes). Students were sent to centers for practice (fifteen minutes).

Day Three: Teacher played "Show Me" game with picture cards (Appendix F: 58) for review of already familiar consonants and reviewed procedure for centers (fifteen minutes).

WEEK TWO

Day One: Teacher showed and reviewed filmstrips (Appendix E:55) on consonants C, W, and Y

Students orally practice sounds with partner (fifteen minutes). Students visited centers for practice (fifteen minutes).

Day Two: Teacher showed and reviewed filmstrips on consonants J, D, and B. Students orally practiced sound with partner (fifteen minutes). Students visited centers for practice.

Day Three: Teacher reviewed story problem #1 on overhead using the 5-step process for solving the problem (each child has already had a chance to work on this previously in a center). Students visited centers (fifteen minutes).

WEEK THREE

Day One: Teacher introduced long "a' sound by reading Sails, Rails and Wings and discussed the sounds. Words were webbed on board that have "a"sound (fifteen minutes). Students visited centers.

Day Two: Teacher introduced short "a" sound by reading Millions of Cats and discussed the sound. A big cat was filled with short "a" words (fifteen minutes) Students visited centers (fifteen minutes).

Day Three: Teacher reviewed story problem #2 on overhead using the 5-step process for solving the problem. Students checked their paper from center work (fifteen minutes). Students visited centers.

WEEK FOUR

Day One: Teacher introduced long "e" sound by reading The Carrot Seed and discussed the sounds. Students filled a carrot seed with long "e" words (fifteen minutes). Students visited centers (fifteen minutes).

Day Two: Teacher introduced short "e" sound by reading Plants We Know and discussed the sound (fifteen minutes). Students were allowed to write as many short "e" word they could think of in two minutes. The students worked in groups of four (fifteen minutes). Students visited centers (fifteen minutes).

Day Three: Teacher reviewed story problem #3 on overhead using the 5-step problem solving process. Children checked papers from centers (fifteen minutes). Students visited centers (fifteen minutes).

WEEK FIVE

Day One: Teacher introduced long"i" sound by reading The Very Busy Spider and discussed the sound (fifteen minutes). Students added legs to spiders of long "i" words. Students visited centers (fifteen minutes).

Day Two:Teacher introduced short "i" sound by reading One Fish, Two Fish, Red Fish, Blue Fish and discussed the sound (fifteen minutes). Students visited centers (fifteen minutes).

Day Three: Teacher reviewed story problem #4 on overhead using the 5-step problem solving process. Children checked papers from centers (fifteen minutes). Students visited centers (fifteen minutes).

WEEK SIX

Day One: Teacher introduced long "o" sound by reading Fox's Dream and discussed the sound. Students listed long "o" words on individual slates for practice (fifteen minutes). Students visited centers (fifteen minutes).

Day Two: Teacher introduced short "o" sound by reading Jane Martin, Dog Detective and discussed sound (fifteen minutes). Students visited centers (fifteen minutes)

Day Three: Teacher reviewed story problem # 5 on overhead using the 5-step problem solving process. Students checked work from centers (fifteen minutes). Students visited centers (fifteen minutes).

WEEK SEVEN

Day One: Teacher introduced long "u" by reading and singing Truck Song and discussed sound Children looked for long "u" words in the song (fifteen minutes). Students visited centers (fifteen minutes).

Day Two: Teacher reviewed long "u" and introduced short "u" by reviewing Truck Song. Students practiced song with partners (fifteen minutes). Students visited centers (fifteen minutes).
Day Three: Teacher reviewed story problem # 6 on overhead using the 5-step process. Students checked work from centers (fifteen minutes). Students visited centers (fifteen minutes).

WEEK EIGHT

Day One: Teacher reviewed all vowels by playing "Show Me" with picture cards. Students completed a color me practice sheet (fifteen minutes). Students visited centers (fifteen minutes).
Day Two: Teacher reviewed all vowels by showing a filmstrip, A,E,I,O,U (fifteen minutes). Students visited centers (fifteen minutes).
Day Three: Teacher reviewed story problem # 7 on overhead using the 5-step process. Students checked work from centers (fifteen minutes). Students visited centers (fifteen minutes).

WEEK NINE

Day One: Teacher introduced "sh" and "ch" by showing a filmstrip, SH-CH and discussed (fifteen minutes). Students visited centers (fifteen minutes).
Day Two. Teacher introduced "th" and "wh" by showing a filmstrip, TH-WH and discussed (fifteen minutes). Students visited centers (fifteen minutes).
Day Three: Teacher reviewed story problem #8 on overhead using the 5-step problem solving process. Students checked the work from the center (fifteen minutes).

WEEK TEN

Day One: Teacher introduced "st" and "sp" by reading The Lady and the Spider. Students fill abdomens of two spiders, an ST Spider and SP Spider (fifteen minutes). Students visited centers, (fifteen minutes).
Day Two: Teacher reviewed blends and digraphs with a filmstrip and discussed sounds of each (fifteen minutes). Students visited centers (fifteen minutes).
Day Three: Teacher reviewed story problem #9 on overhead using the 5-step problem solving process. Students checked work from the center (fifteen minutes). Students visited centers (fifteen minutes).

WEEK ELEVEN

Day One: Teacher reviewed all vowels sounds using "show me" cards (fifteen minutes). Students visited centers (fifteen minutes).
Day Two: Teacher reviewed all consonants, digraphs and blends with "show me" cards (fifteen minutes). Students visited centers (fifteen minutes).
Day Three: Teacher reviewed story problem #10 on overhead using the five step problem solving process (fifteen minutes). Teacher administered phonics post-test.

WEEK TWELVE

Day One: Teacher reviewed story problem #11 on overhead using the five step problem solving process (fifteen minutes). Students visited centers (fifteen minutes).
Day Two: Teacher read orally story problem #12 . Students solved the problem orally using the 5-step problem solving process (fifteen minutes). Students visited centers.
Day Three: Teacher administered the problem solving post-test. Students visited centers. Teachers worked with some children orally on post-test.

Direct instruction was administered three days a week for twelve weeks. Instruction included two days of phonics instruction on the topic of the week and one day of instruction on the problems solving process. After direct instruction, students rotated to assigned centers. Each person worked at the comprehension problem solving center, the listening center and the game center once a week. All the games listed in the appendix were available each day at the game center (Appendix .53).

During the course of implementation adjustments were made as needed. The writer had weekly conferences with the teacher to discuss any changes needed and to make arrangements to correct problems that became evident. Bi-weekly conferences with the principal and observer were proposed however, due to circumstances beyond the writers capabilities, the principal was not always available for the bi-weekly meetings. However, the observer and writer maintained open communication that provided for a smooth and effective implementation of this practicum. One major change concerned the number of children in the target population at the time of post-tests. One withdrawal and two children that never became available for testing changed the target population total to 51 for the phonics post-test and 49 for the problem solving post-test. All other procedures, suggestions, and time factors were followed as proposed.

Chapter IV

RESULTS

Objective one required the use of a pre-test and a post-test. Both tests consisted of consonant sounds, vowel sounds, digraphs and blends. The format included a sample work with a letter(s) underlined. Students read the word and determined the sound of the underlined letter(s). Students then read the three following words and circled the word with the same sound as the underlined letter in the sample word.

The pre-test determined the level of each child. It also served as a needs assessment tool for lesson planning. The post-test was a similar phonics test with the same format. The table below shows progress of students in comparason to pre-test results. Attainment of objective one was determined through comparason of the pre-test and post-test results.

Table IV

Phonics Evaluation

	Mastery	Below	Total
Pre-test	12	40	52
Post-test	43	8	51

*One student was unavailable for post-test

In comparason, the post-test revealed a substantial improvement. The proposed objective stated that 40 out of 52 students would master 24 of the 30 skills. The objective was attained with 43 of the students successfully mastering most phonic skills. Also, only eight students fell below grade level showing a tremendous improvement.

Objective two required the mastery of basic skills in the reading basal. Mastery consisted of four out of five items of each skill tested. The magazine tests were administered at the completion of the 1-2 reading basal text. Only thirty-eight students were at the level necessary to administer magazine tests in level 1-2. Of the students tested, thirty

students mastered 80 per cent of the skills. The other children required remediation before the 80 per cent mastery was attained. Objective two was not successfully attained.

Objective three required children to read a short real life story situation. An oral pre-test had been given to determine levels of students. Students followed a 5-step problem solving process to provide a solution to the story problem. These steps include:

1. READ: (Pre-test, listening) story
2. DATA: Answer who or what
3. QUESTION: Understand what is ask
4. SOLUTION: Find an answer
5. CHECK: Is this solution the best

Effective use of four out of five steps of the problem solving process demonstrated mastery of the critical thinking objective. Attainment of objective three was determined through post-test results when compared to pre-test results. Table V reveals results of the comparason.

Table V

Problem Solving Evaluation

	Mastery	Below	Total
Pre-test	15	37	52
Post-test	36	13	49

*Three students were unavailable for post-test

The results indicated the success of a problem solving process as a means of developing critical thinking skills because of the success of the majority of the students. According to the self-reflection critical thinking checklist, much of the success could be directly related to the reinforcement from the teacher for students to ask questions and seek ideas from peers. Another positive relationship involved relating story problems to personal experiences. The thirteen students below level completed various stages of the process but could not provide an adequate solution. Three students could not provide a solution at all. Objective three was not attained.

Chapter V

Recommendations

This practicum provided the writer with data that confirmed the definite need for phonetic instruction in the first grade classroom. The writer's observations of students success and the results of the post-test indicated a significant improvement in the first grade target population. Students enjoyed the drill practice and the center activities. The only problems encountered was the length of time for direct teaching. Fifteen minutes of direct teaching limited student participation. Fifteen minutes for center work was adequate.

Although objective two was not attained, the writer observed much improvement in global reading skills of the target population. Children were unable to be tested in all the magazine tests because they had not finished reading the text, but they were reading at the 1-2 level.

Critical thinking and problem solving was a weak area for students in the target population. Although there was a major improvement after

implementation, the writer observed that many students had difficulty when applying the same process to a longer story. Some children confused the process with a main idea process taught earlier in the year. This process of problem solving may not be retained unless it was repeated year after year. One isolated implementation did not result in useful data for future application. Students did not seem to enjoy working with the process however, a positive observation by the writer was the amount of cooperative learning that was developed during the implementation of this objective.

To conclude the writer would suggest recommendations concerning this practicum. The following recommendations are based on the implementation, observations, and results of this practicum.

1. Use of an intense phonics program integrated with a literature based basal program
2. Use of a block of time set aside for direct teaching of phonics at least three days a week (thirty minutes)
3. Use of a block of time set aside for practice and application

of skills taught (fifteen minute)

4. Continued research on the use of a problem solving process as means to develop critical thinking skills

The outcome of this practicum convinced the writer of the success that an intensive phonics program can have on first grade readers. The results and enthusiasm have been shared with the first grade teachers at the setting. The teachers are willing to continue the phonics segment of this practicum when teaching first graders. Others that may want to include phonics as an integrated portion of reading can obtain resources as described in the appendix pages of this practicum.

References

Addison Wesley Mathmatics. Problem Solving Process. Addison Wesley Publishers, Inc., California: 1985.

Alexander, Estill J. Teaching Reading. Little, Brown & Company, Boston: 1983.

Cullinan, Bernice E. "Why Whole Language?" Instructor, May 1990, P.46.

Curry, Shelly, Personal Interview, January 15, 1991.

Dermott, Pinzari, et al. "First Grade Reading Achievement and Syntactic Density". Reading Improvement, Summer 1982, pp. 135-142.

Jones, Beau Fly. Developing Minds: A Resource Book For Teaching Thinking. "Reading and Thinking". 1985.

Lamme, Linda Leonard. "Whole Language Instruction: Teaching Authorship". The Reading Teacher, November, 1989, pp. 46-50.

Matteoni, Lane et al. The Economy Company. Oklahoma City, Educational Publishers: 1978.

Rafferty, Charlotte, Personal Interview. January 17, 1991.

Spiegel, Dixie Lee. "Reinforcement in Phonics Materials". The Reading Teacher. January, 1990, pp. 328-329.

Swajkowski, Cynthia, "Teaching the Word Families Increases the Reading Vocabulary of First Graders in Contrast to First Graders Taught Only Phonics Analysis". Practicum Paper, May, 1985.

Tunmer, William E. and Nesdale, Andrew R. "Phonemic Segmentation Skill and Beginning Reading". Journal of Educational Psychology. Vol. 77, 1985.

Umbach, Darch, Halpin, "Teaching Reading to Low Performing First Graders A Comparason of Two Instructional Approaches". Research preparation for the Department of Rehabilitation and Special Education, Auburn University, Alabama. November, 1987.

APPENDICES

APPENDIX A

PHONICS PRE-TEST

Phonics Pre-test

Name _____

CIRCLE THE WORD WITH THE SAME SOUND AS THE UNDERLINED LETTER.

SAMPLE: cat	hid	can	bed
1. gate	man	take	is
2. kite	sit	hit	like
3. go	coat	cot	up
4. use	bus	red	tube
5. feet	seat	set	sit
6. mat	cake	sad	wait
7. egg	leg	deer	fox
8. it	like	mit	hike
9. mop	got	boat	love
10. us	bike	tube	bug
11. box	dog	see	love
12. keep	red	said	see
13. it	too	stop	make
14. dig	but	best	dog
15. love	hot	even	for

16. stop	chin	sky	post
17. shop	push	come	just
18. chop	cat	lunch	car
19. flip	fly	fry	foot
20. from	to	for	freeze
21. play	put	plum	slip
22. brown	up	brick	but
23. when	why	was	win
24. the	it	top	this
25. trip	too	try	tune
26. swim	shoe	so	swing
27. slide	stop	slip	shop
28. car	city	come	see
29. meat	egg	we	get
30. mask	shake	skate	make

APPENDIX B

PHONICS POST-TEST

Phonics Post-test

Name _____

CIRCLE THE WORD WITH THE SAME SOUND AS THE UNDERLINED LETTER.

SAMPLE: Cat	cake	said	flat
1. late	hat	wait	sit
2. bike	mit	my	is
3. so	stop	go	mop
4. tube	mule	tub	us
5. heat	got	get	meet
6. hat	that	gate	up
7. set	eat	old	get
8. big	like	hit	from
9. stop	got	love	boat
10. bus	goes	hurt	hug
11. back	dig	bite	help
12. key	make	car	for
13. too	two	milk	day
14. dog	baby	mom	dad
15. very	in	love	sad

16. must	step	move	goes
17. hush	make	shoe	some
18. much	chop	came	shop
19. fly	farm	flip	like
20. fry	for	ate	from
21. please	play	much	ship
22. broke	bike	bring	boat
23. who	win	when	won
24. them	lunch	tooth	run
25. train	just	trip	take
26. swop	some	pop	swim
27. slip	such	sleep	pin
28. can	come	city	see
29. bait	lay	cat	but
30. skip	saw	mask	kite

APPENDIX C

PROBLEM SOLVING PRE-TEST

Problem Solving Pre-test

Name_____

You're the Judge

A family of four is fighting over the winnings of a lottery ticket. Here are the facts: The son, age 9 had the idea to buy the ticket. The daughter, age 11, gave her brother the money to buy the ticket. The mother found the lottery ticket in the trash and compared the number with the winning number in the newspaper. The father drove across town in less than two minutes in order to claim the winnings before the deadline of the contest. Who should get the money?

5-step Problem Solving Process

1. Read (Listen to the story) Yes___ No___
2. Data (Who or what) _____

_____

3. Question (What is the problem)_____

_____

4. Solution (What should happen)_____

_____

5. Check solution (Is it the best solution) Yes___ No___

APPENDIX D

PROBLEM SOLVING POST-TEST

Problem Solving Post-test

Name_____

A Good Friend

Jane and Sue are best friends. They like to go to the store. They buy candy and gum. They have lots of fun. One day Jane took some gum but did not pay for it. She told Sue to take some too. Jane says if Sue does not take some gum too, they can not be friends anymore. What can Sue do?

5-step Problem Solving Process

1. Read (silently) yes_____ no_____
2. Data (who or what)_____

_____

3. Question (problem)_____

_____

4. Solution (what should happen)_____

_____

5. Check your solution (Is it the best solution) Yes_____ No_____

APPENDIX E

PHONETIC ACTIVITY LISTENING CENTERS

PHONETIC ACTIVITY LISTENING CENTERS

Phonics One - Consonants	(6 tapes with filmstrips)
Phonics Two - Vowels	(6 tapes with filmstrips)
Consonant Blends	(6 tapes)
Consonant Digraphs	(6 tapes)
Comprehension One	(6 tapes)
Comprehension Two	(6 tapes)

APPENDIX F

PHONETIC GAMES AND ACTIVITIES

PHONETIC GAMES USED IN CENTERS

Firefly's Detective Bone Game
The Rhyme Game
Long Vowel Nature Trail
Digraph Mix-Match
A Home for Birds (Blends)
Lunch to Munch Rhyming Words
Wildlife Vowel Decoding Game
Short Vowel Decoding Game

Flick the Spinner (Blends)
Cow Bell (Digraphs)

ACTIVITY CARDS

Phonics Cards (42 cards)
Reading Cards (42 cards)
*Published by Frank Shaffer Publications, Inc.

WIPE OFF CARDS

Blends and Digraphs
Long and Short Vowels
Beginning and Initial Sounds
Word Patterns
Rhyming Words
*Published by Trend Enterprises, Inc.

APPENDIX G

BOOKS USED IN DEVELOPMENT OF LESSON PLANS

BOOKS USED IN DEVELOPMENT OF PLANS
FOR PHONICS AND PROBLEM SOLVING PROCESS

Strain Your Brain
by Becky and Charlie Daniel

Gills and Bills
by Martha Resnick and Carolyn Hyatt

Drawing Conclusions
by Richard A. Boning

Phonics Plus
by Charles Mangrum and Peter Mesmore

The New Phonics We Use
by Arthur Heilman

Merrill Phonics
by Charles Merrill Books, Inc.

APPENDIX H

A SAMPLE OF LESSON PLANS

SUGGESTED LESSON PLAN
Week Three

Day One: Long Vowel "a"

1. Introduce the sound of long "a" and all rules that apply
2. Read Sails, Rails, and Wings. Discuss all words that have long "a" that are found in the story.
3. Write three words in rectangles drawn on the board. Form a train on the board as you web together.
4. Review, and then divide into groups for center work.

Day Two: Short Vowel "a"

1. Introduce the sound of short "a" and all rules that apply.
2. Read Millions of Cats. Discuss all words in the story that have short "a" sounds and then review long "a" words that were discovered.
3. Draw a large cat on board and let volunteers fill up the cat with short "a" words from the story or from independent thought.
4. Review and divide into groups for center work.

Day Three: Problem Solving

1. Review all steps to problem solving.
2. Orally read the story from the previous days center work.
3. Together decide on the best solution and dicuss why.
4. Review steps and then divide into groups for center work.

APPENDIX I

LITERATURE BOOKS USED FOR DIRECT INSTRUCTION

LITERATURE BOOKS USED FOR PHONICS INSTRUCTION

Cat and Canary By Michael Foreman
Millions of Cats by Wanda Gag
Garth Pig and the Ice Cream Lady
by Mary Rayner
One fish, Two Fish, Red Fish, Blue Fish
by Dr. Seuss
Fox's Dream by Keizaburg Tejima
Jane Martin, Dog Detective by Eve Bunting
Truck Song by Diane Siebert
Sails, Rails, and Wings by Seymour Reit
Train Whistle: A Language in Code
by Helen Sattler
The Carrot Seed by Ruth Krauss
Plants We Know: A New True Book by Irene Miner
The Lady and the Spider by Faith McNulty
The Very Busy Spider by Eric Carle
Anno's U.S.A. by Mitsumasa Anno
Town and Country Mouse by Alice and Martin
Provensen